NOAA
S 220

## GENERAL NOTES

1. THIS DRAWING DETAILS THE WORK NECESSARY TO INSTALL NEW POLAR-RATED LIFE RAFTS AND CRADLES ABOARD NOAA SHIP FAIRWEATHER, INCLUDING REMOVAL OF EXISTING RAFT DEPLOYMENT SYSTEMS AND INSTALLATION OF A RAISED PLATFORM ON THE STARBOARD "F" DECK AND EXTENSION OF THE BOAT DAVIT PLATFORM ON THE PORT "F" DECK.
2. FRAME SPACING IS 21" THROUGHOUT INDICATED AREAS OF WORK
3. ALL WELDING, WORKSMANSHIP, AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT ABS MARINE VESSEL RULES, USCG, AND IMO REGULATIONS
4. RAFT CRADLES SHALL BE INSTALLED CENTERED WITHIN THEIR RESPECTIVE OPENINGS IN THE NEW RAILINGS DETAILED ON SHEET 6. FOLLOW MANUFACTURER RECOMMENDATIONS REGARDING CRADLE INSTALLATION DISTANCE FROM DECK EDGE.
5. INSTALL STUDS OR THOUGH-BOLTS TO DECK OR PLATFORM TO SECURE LIFERAFT CRADLE AS REQUIRED BY MANUFACTURER
6. MODIFY STBD "D" DECK RAILINGS AND ADD STANCHIONS SIMILAR TO DETAIL 44-D WHERE EXISTING LIFE RAFT STRUCTURE IS REMOVED
7. EXCEPT WHERE NOTED, ALL WELDS ARE TO BE DOUBLE CONTINUOUS FILLETS WRAPPED AT THE ENDS
8. EXCEPT WHERE NOTED, WELDS SHALL BE SIZED PER TABLE 4-C, OR IN ACCORDANCE WITH ABS, CFR, AND USCG REGULATIONS, WITH THE REGULATIONS TAKING PRECEDENCE.
9. PROVIDE RELIEF CUTS AS SHOWN IN DETAIL 4-C.
10. SHARP OR ROUGH EDGES OF EXPOSED WORK SHALL BE GROUND SMOOTH TO PREVENT INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT
11. CONTRACTOR SHALL RENEW ALL DAMAGED OR DISTURBED INSULATION
12. COATINGS SHALL BE APPLIED TO NEW OR DISTURBED AREAS TO MATCH EXISTING
13. INSTALL SUITABLE HANGERS FOR DRAIN PIPE INSTALLATION, SPACED NO MORE THAN 3 FEET APART
14. DRAIN PIPING MAY BE SUBSTITUTED FOR PVC OR OTHER SUITABLE MATERIAL AT DISCRETION OF COR
15. PROVIDE AND INSTALL SAFETY CHAINS ACROSS LIFE RAFT PLATFORM OPENINGS. SAFETY CHAINS ON BRIDGE WING OPENINGS MAY BE REUSED

## BILL OF MATERIALS

| NO. | QTY | UNIT | DESCRIPTION | MATERIAL | MATL. SPEC. | UNIT WT. [LB] | REMARKS |
|---|---|---|---|---|---|---|---|
| 1 | 96 | $FT^2$ | PLATE, $\frac{1}{4}$" | ABS GRADE A | | 10.2 | |
| 2 | 5 | $FT^2$ | PLATE, $\frac{3}{8}$" | ABS GRADE A | | 15.3 | |
| 3 | 40 | FT | FLAT BAR, $\frac{3}{4}$"x3" | CARBON STEEL | ASTM A36 | 7.7 | |
| 4 | 60 | FT | ANGLE, 3"x3"x$\frac{1}{4}$" | CARBON STEEL | ASTM A36 | 4.9 | |
| 5 | 2 | FT | ROUND BAR, $\frac{3}{8}$" | CARBON STEEL | | | |
| 6 | 20 | FT | PIPE, 3" SCH80 | CARBON STEEL | ASTM A53 | 10.3 | SEAMLESS |
| 7 | 8 | FT | PIPE, 1-$\frac{1}{2}$" SCH40 | CARBON STEEL | ASTM A53 | 2.7 | SEAMLESS, SEE G.N. 14 |
| 8 | 30 | FT | PIPE, 1" SCH40 | CARBON STEEL | ASTM A53 | 1.7 | SEAMLESS |
| 9 | 60 | FT | PIPE, $\frac{3}{4}$" SCH40 | CARBON STEEL | ASTM A53 | 1.1 | SEAMLESS |
| 10 | 2 | EA | ELBOW, 45° | CARBON STEEL | ASTM A234 | | |
| 11 | 1 | EA | DECK DRAIN, 1-$\frac{1}{2}$" | CARBON STEEL | | | BFG MARINE DK-120, OR EQUAL |
| 12 | 6 | EA | LIFE RAFT, 35-PERSON | VARIOUS | | 550.0 | VIKING P/N 35DK+, POLAR-RATED, GFE |
| 13 | 2 | EA | RACK, SINGLE RAFT | CARBON STEEL | | 114.6 | VIKING P/N 1015751, GFE |
| 14 | 2 | EA | RACK, DOUBLE RAFT | CARBON STEEL | | 198.4 | VIKING P/N 1015773, GFE |

## REVISIONS

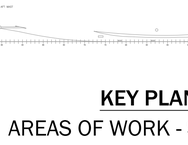
| REV | ZONE | DESCRIPTION | DATE | APPROVED |
|---|---|---|---|---|
| - | ALL | INITIAL RELEASE | 9/11/2023 | 10/11/2023 |
| A | | ADDED DET 30-A, DET 32-A TO SHOW STBD PLATFORM END CONNECTIONS PER ABS COMMENT | 11/7/2023 | |
| | | | | |

### TABLE 3-C: FILLET WELD SIZING

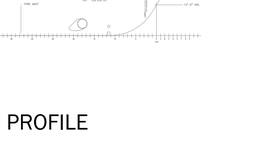
| THICKNESS OF THINNER PLATE | ≤ $\frac{1}{4}$" | $\frac{5}{16}$" | $\frac{3}{8}$" | $\frac{7}{16}$" | $\frac{1}{2}$" | $\frac{5}{8}$" | ≥ $\frac{3}{4}$" |
|---|---|---|---|---|---|---|---|
| FILLET WELD LEG SIZE | $\frac{3}{16}$" | $\frac{7}{32}$" | $\frac{7}{32}$" | $\frac{1}{4}$" | $\frac{5}{16}$" | $\frac{5}{16}$" | $\frac{3}{8}$" |

CORNER SNIPE

CORNER SCALLOP



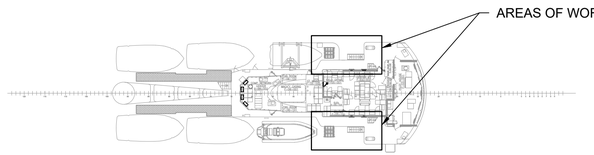

SCALLOP IWO BUTTS & SEAMS




## DETAIL 4-C

TYPICAL RELIEF CUTS

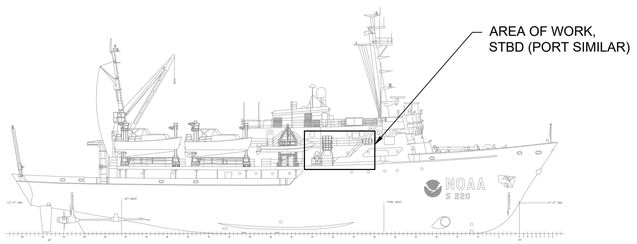
SCALE: SCALE: 6" = 1'-0"




## KEY PLAN 4-B

AREAS OF WORK - F DECK

SCALE: 1/32"=1'-0"




## KEY PLAN 4-A

AREAS OF WORK - STBD PROFILE

SCALE: 1/32"=1'-0"

| SHT | REV | TITLE |
|---|---|---|
| 6 | - | RAILINGS & DRAIN DETAILS |
| 5 | - | PORT PLATFORM DETAILS |
| 4 | A | STBD PLATFORM DETAILS |
| 3 | - | REMOVALS |
| 2 | - | INSTALLATION ARRANGEMENTS |
| 1 | A | GENERAL NOTES |

**DRAWING INDEX**

| NO. | TITLE | DRAWING NO. |
|---|---|---|
| 5 | POLAR LIFE RAFT ELECTRICAL MODIFICATIONS | FA-311-002 |
| 4 | PLATING & FRAMING - MAIN DECK | S11-6-2K |
| 3 | PLATING & FRAMING - SUPER DECK | S11-6-3K |
| 2 | PLATING & FRAMING - NAV BRIDGE DECK & TOP OF HOUSE | S11-3-8K |
| 1 | BOAT DAVIT STRUCTURAL MODIFICATIONS, REV. B | FA-S-8202-2 |

**REFERENCES**

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLE ± 0.01°
INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

THIRD ANGLE PROJECTION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| | | |
|---|---|---|
| Drawn by | NWT | Date 8/15/2023 |
| Checked by | RSG | Date 8/24/2023 |
| Approved by | | Date |
| ABS Approval | | Date |
| USCG Approval | | Date |
| HULL NUMBER | S-220 | SWBS 179 |

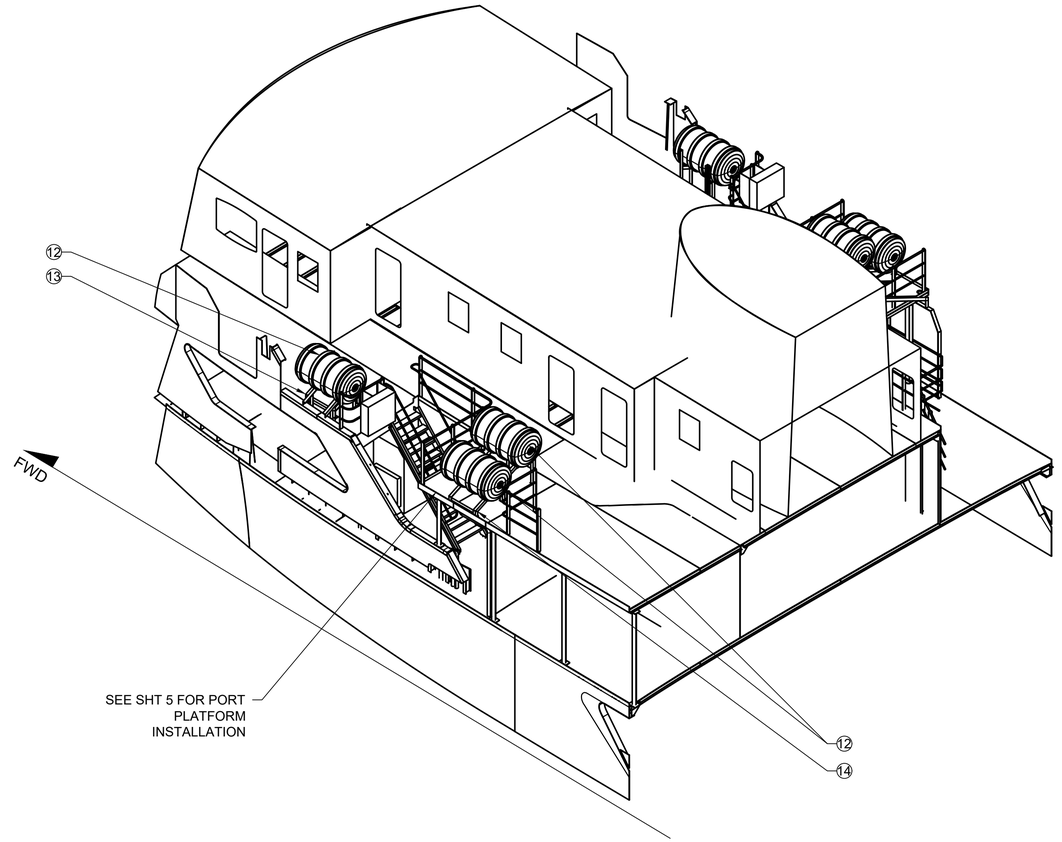
Prepared for
NOAA Office of Marine & Aviation Operations
1315 East West Highway
Silver Spring MD 20910

Drawing Title
# NOAA SHIP FAIRWEATHER
## LIFE RAFT PLATFORM INSTALLATION
GENERAL NOTES

| Size | Drawing Number | Rev |
|---|---|---|
| D | FA-179-001 | A |
| Scale | | Sheet 1 of 6 |

REV: A

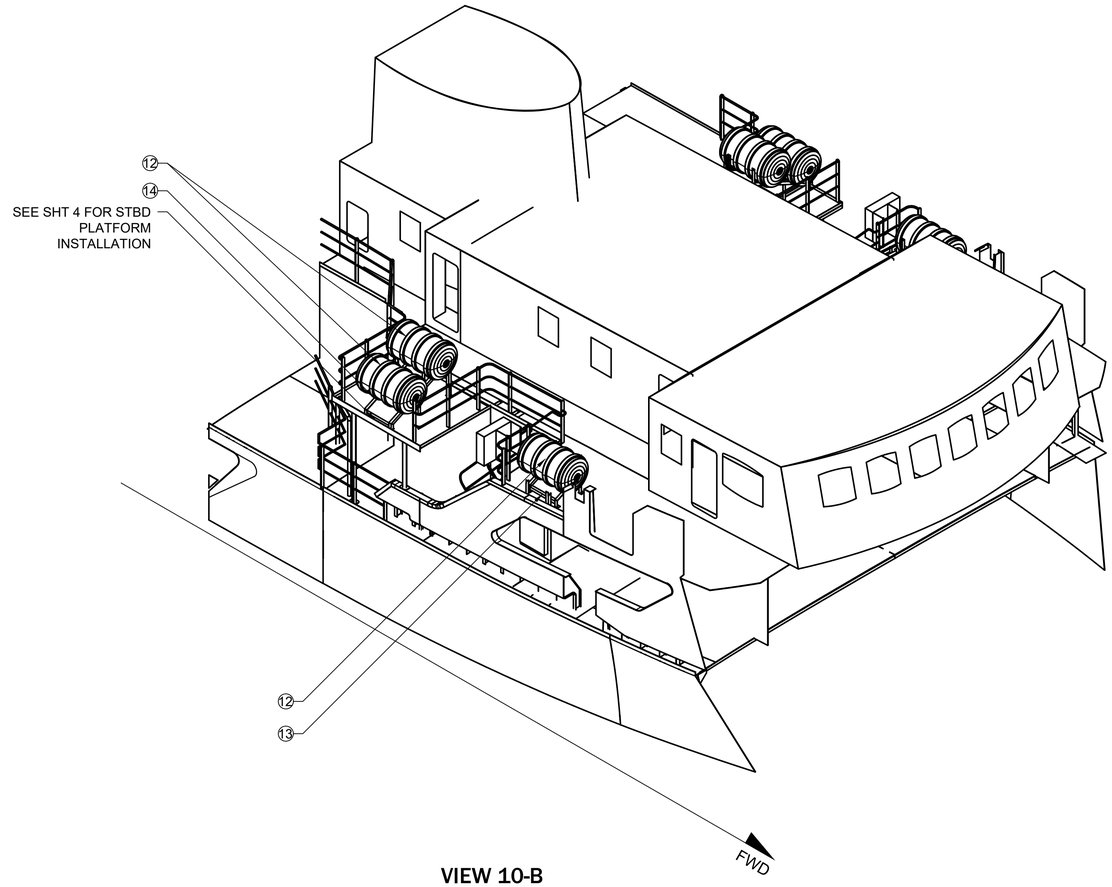
DWG: FA-179-001




**VIEW 14-B**

PLATFORM & RAFT ARRANGEMENT STBD

SCALE: 3/16"=1'-0"




**VIEW 10-B**

PLATFORM & RAFT ARRANGEMENT STBD

SCALE: 3/16"=1'-0"

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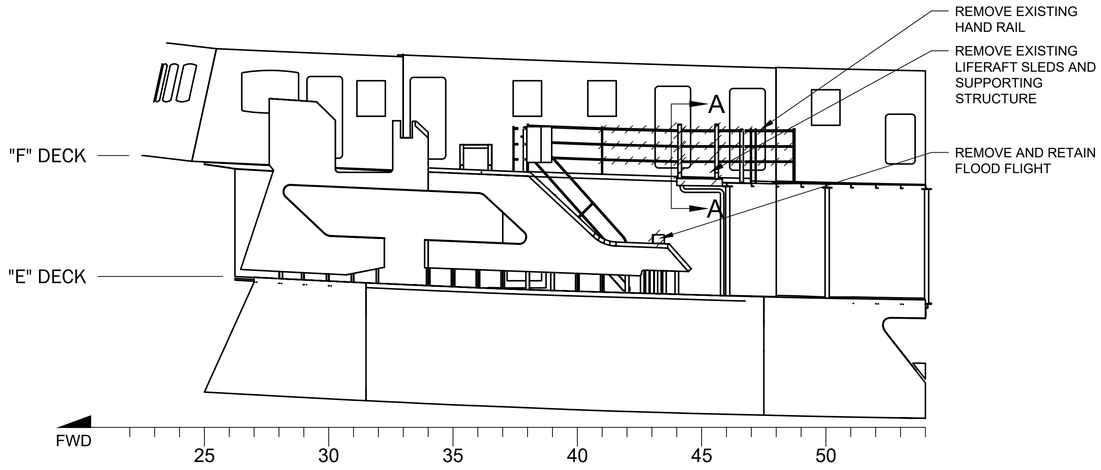
Title: INSTALLATION ARRANGEMENTS

Size: D | Drawing Number: FA-179-001 | Rev: -

Scale:

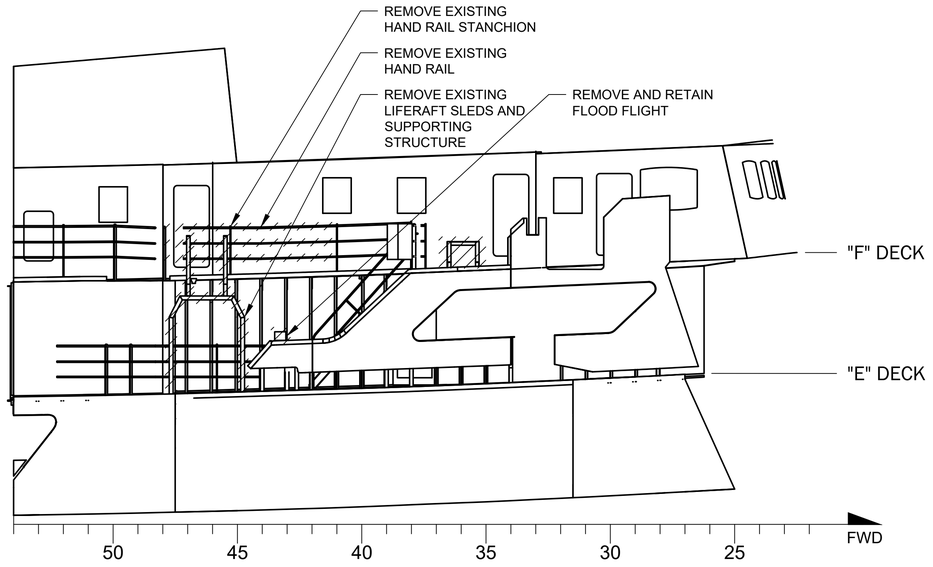
Sheet 2 of 6




**ELEVATION 21-C**

REMOVALS - PORT "E" & "F" DECKS

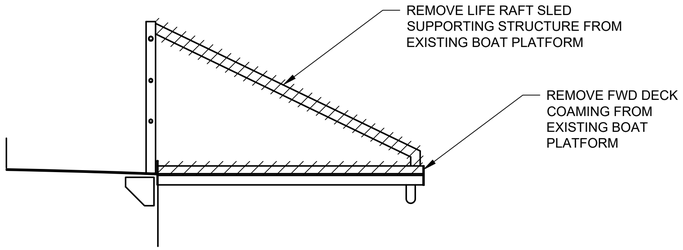
SCALE: 3/16"=1'-0"




**ELEVATION 18-C**

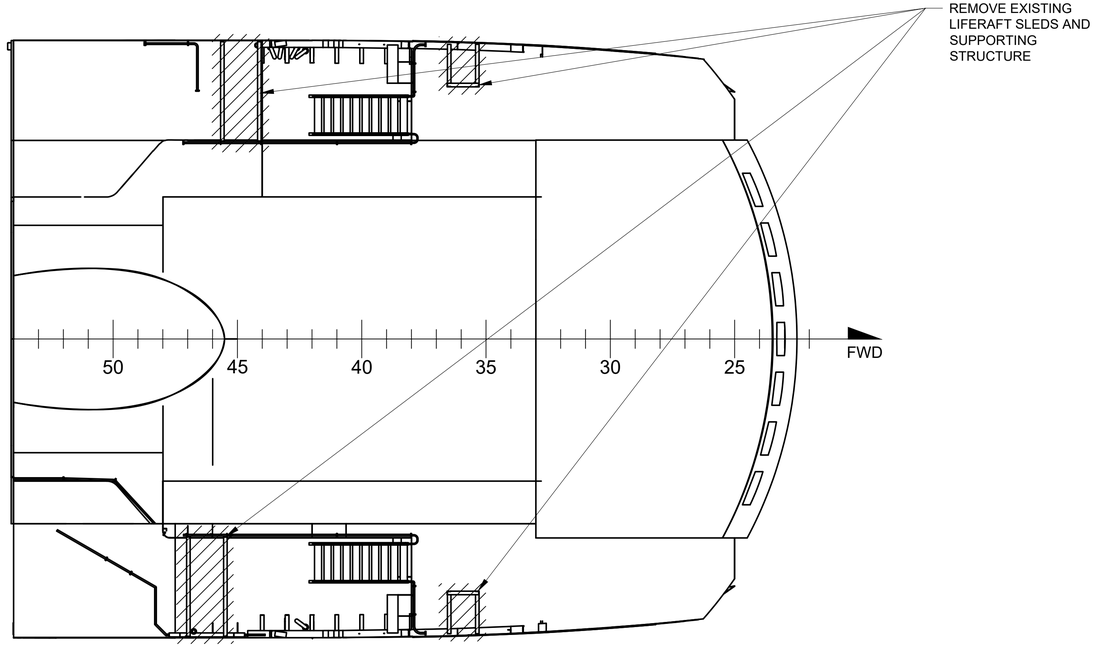
REMOVALS - STBD "E" & "F" DECKS

SCALE: 3/16"=1'-0"




**SECTION A-A**

SCALE: 1/2"=1'-0"




**PLAN 18-A**

REMOVALS

SCALE: 3/16"=1'-0"

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Title: REMOVALS

Size: D | Drawing Number: FA-179-001 | Rev: -

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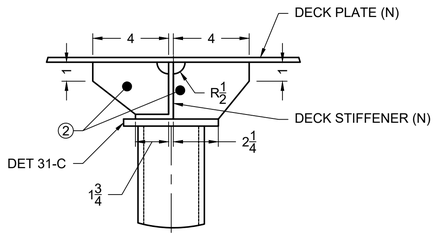
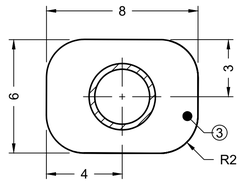
Sheet 3 of 6




**DETAIL 31-D**

STANCHION TOP GUSSETS

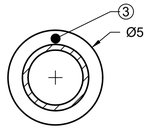
SCALE: 3"=1'-0"




**DETAIL 32-C**

STANCHION CAP BOTTOM PLATE

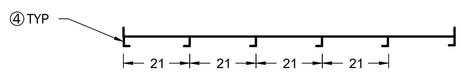
SCALE: 3"=1'-0"




**DETAIL 31-C**

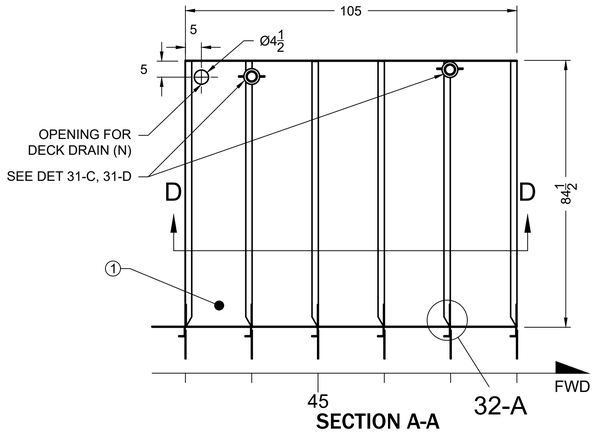
STANCHION TOP CAP PLATE

SCALE: 3"=1'-0"




**SECTION D-D**

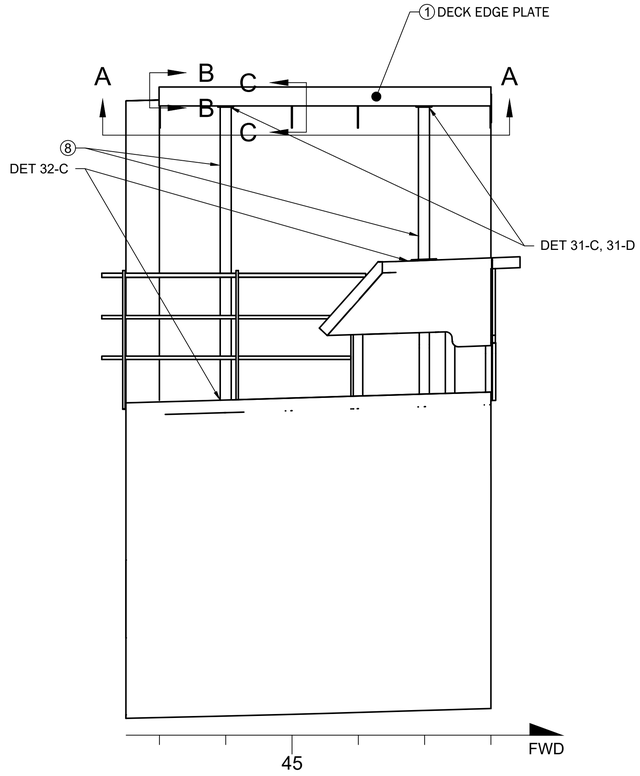
SCALE: 1/2"=1'-0"




**SECTION A-A**

PLATFORM - VIEW LOOKING UP

SCALE: 1/2"=1'-0"




**INSET 26-C**

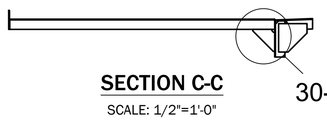
STBD LIFE RAFT PLATFORM

SCALE: 1/2"=1'-0"



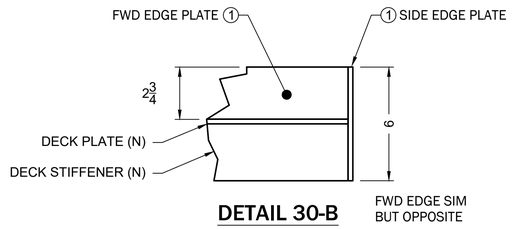

**SECTION B-B**

SCALE: 1/2"=1'-0"




**SECTION C-C**

SCALE: 1/2"=1'-0"

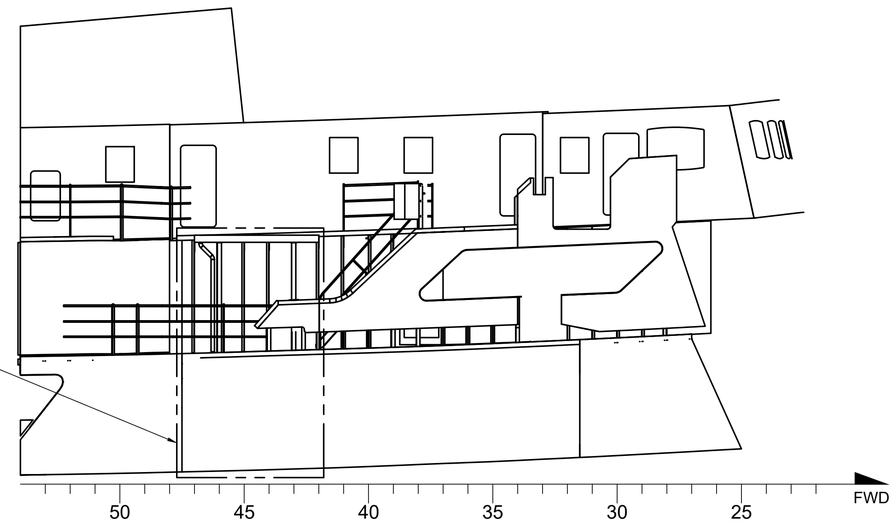



FWD EDGE SIM
BUT OPPOSITE

**DETAIL 30-B**

PLATFORM AFT EDGE

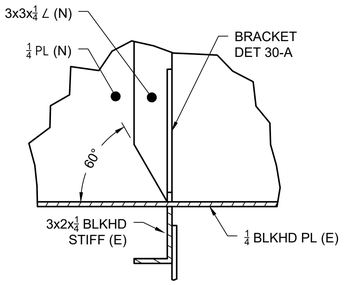
SCALE: 3"=1'-0"




**ELEVATION 26-A**

STBD LIFE RAFT PLATFORM

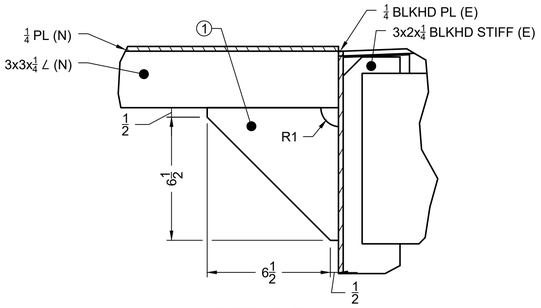
SCALE: 3/16"=1'-0"




**DETAIL 32-A**

PLATFORM STIFF BLKHD END CONN (TYP)

SCALE: 3"=1'-0"




**DETAIL 30-A**

BRACKET (TYP)

SCALE: 3"=1'-0"

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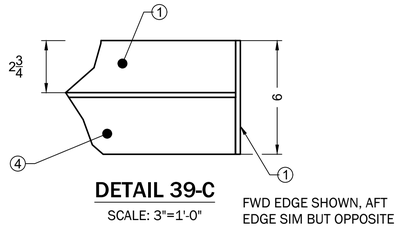
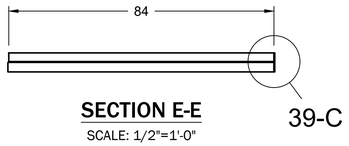
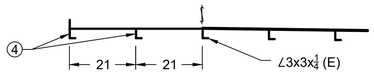



**DETAIL 39-C**
SCALE: 3"=1'-0"

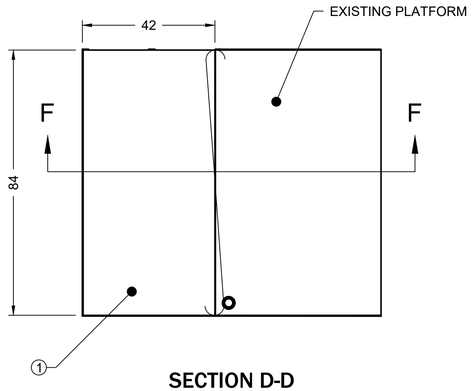
FWD EDGE SHOWN, AFT EDGE SIM BUT OPPOSITE



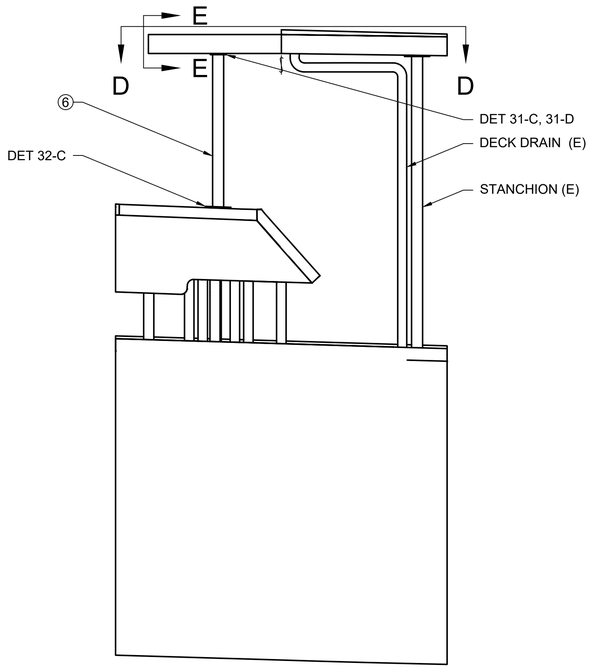

**SECTION E-E**
SCALE: 1/2"=1'-0"



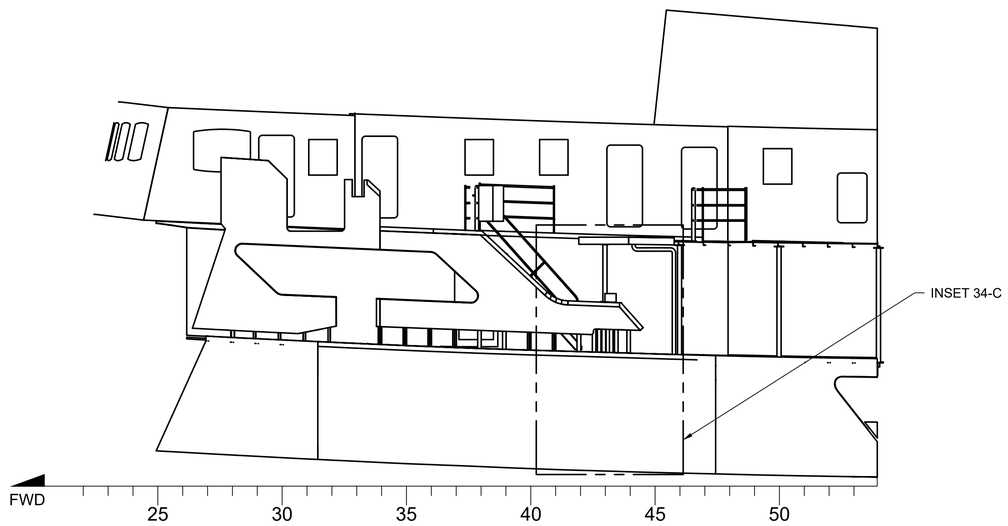

**SECTION F-F**
SCALE: 1/2"=1'-0"




**SECTION D-D**
SCALE: 1/2"=1'-0"




**INSET 34-C**
PORT LIFE RAFT PLATFORM
SCALE: 1/2"=1'-0"




**ELEVATION 34-A**
PORT LIFE RAFT PLATFORM
SCALE: 3/16"=1'-0"

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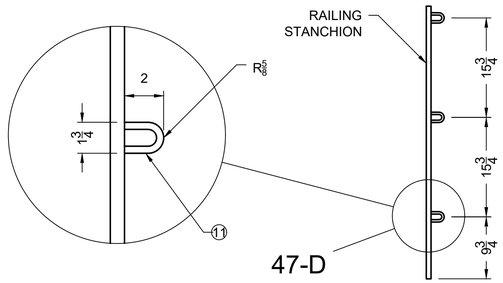
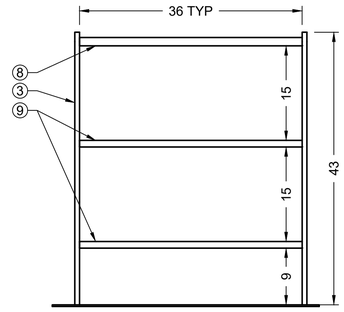
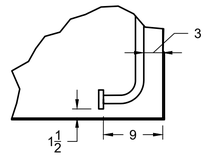



**DETAIL 46-D**
SCALE: 3"=1'-0"

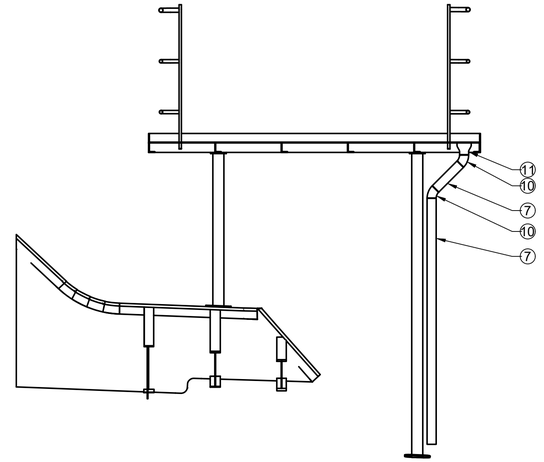
**DETAIL 46-D**
SAFETY CHAIN CONNECTION
SCALE: 1"=1'-0"



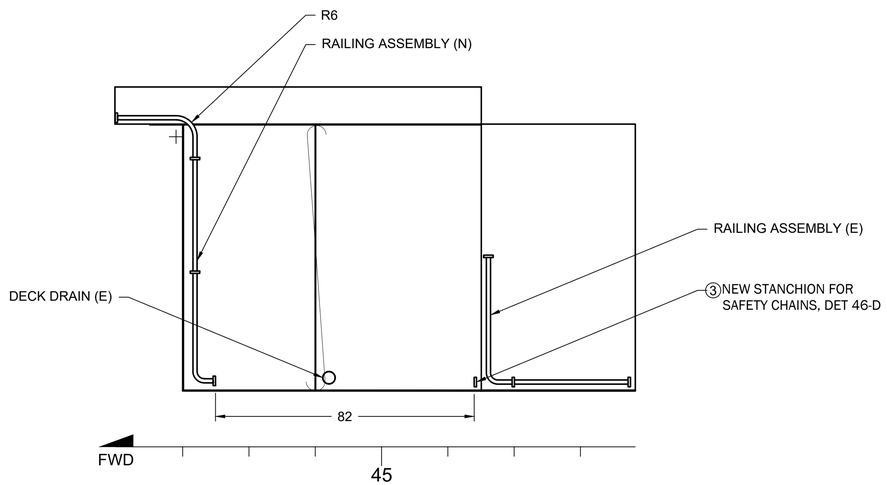

**DETAIL 44-D**
TYPICAL RAILING DETAILS
SCALE: 1"=1'-0"



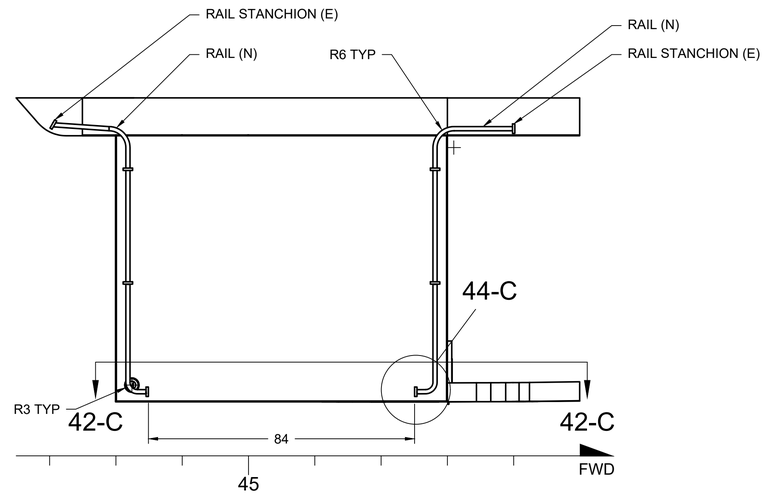

**DETAIL 44-C**
TYPICAL RAILING OFFSET
SCALE: 1"=1'-0"




**SECTION 42-C**
STBD LIFE RAFT PLATFORM DRAIN
SCALE: 1/2"=1'-0"




**PLAN 45-A**
PORT LIFE RAFT PLATFORM RAILINGS
SCALE: 1/2"=1'-0"




**PLAN 42-A**
STBD LIFE RAFT PLATFORM RAILINGS
SCALE: 1/2"=1'-0"

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Title: RAILINGS & DRAIN DETAILS
Size: D | Drawing Number: FA-179-001 | Rev: -
Scale:
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